

Transformations of Base (Parent) Functions Review
Fill in the table and make sketches of each base function with its transformed function

Parent Function	$f(x)=x^2$	$g(x)=x^3$	$h(t)=\sqrt{t}$	$p(t)=\frac{1}{t}$	$f(x)= x $	$g(x)=2^x$	$h(x)=\cos(x)$
Domain	$(-\infty, \infty)$						
Range	$f(x) \geq 0$						
Transformed Function	$f(x)=2(x-1)^2+1$		$h(t)=-\sqrt{2x-6}+2$	$p(t)=\frac{2}{x+1}-2$		$g(x)=3 \cdot 2^{3(x-1)}$	
Horizontal Dilation	1	$\frac{1}{2}$ (or is it?)			1		1
Horizontal Flip	No	None			Yes (?)		None
Horizontal Translation	1 right	4 left			3 right		30° $\frac{\pi}{6}$ right
Vertical Dilation	2	1			$\frac{1}{2}$		3
Vertical Flip	No	Yes			Yes		None
Vertical Translation	1 up	1 down			3 up		2 up
Transformed Domain	$x \in \mathbb{R}$						
Transformed Range	$[1, \infty)$						